

COASTAL CONSERVANCY

Staff Recommendation

April 27, 2006

SANTA BARBARA CHANNEL MARINE MAPPING PROJECT

File No. 06-025

Project Manager: Marina Cazorla

RECOMMENDED ACTION: Authorization to disburse up to \$400,000 to the Foundation of California State University, Monterey Bay (FCSUMB) for the Santa Barbara Channel Marine Mapping project, to fund data acquisition for substrate and marine habitat mapping of state waters of the Santa Barbara Channel and Ventura coast.

LOCATION: Santa Barbara Channel and Ventura coast, in state waters

PROGRAM CATEGORY: Ocean Protection Council / Ocean Program

EXHIBITS

Exhibit 1: Project Area map

Exhibit 2: California Marine Mapping Workshop Report

Exhibit 3: Letters of Support

RESOLUTION AND FINDINGS:

Staff recommends that the State Coastal Conservancy adopt the following resolution pursuant to Section 31220, *et seq.* of the Public Resources Code:

“The State Coastal Conservancy hereby authorizes disbursement of an amount not to exceed four hundred thousand dollars (\$400,000) to the Foundation of California State University, Monterey Bay to fund data acquisition for substrate and marine habitat mapping of state waters of the Santa Barbara Channel and Ventura coast, as shown in Exhibit 1, subject to the following conditions:

1. Prior to disbursement of Conservancy funds, the Foundation of California State University, Monterey Bay shall submit for the review and written approval of the Executive Officer of the Conservancy a project work program, budget and timeline, and the names of any contractors and subcontractors to be retained to carry out the project work.
2. Grant funds shall be used equally in 2006 and 2007 (i.e. \$200,000 during the 2006 field season and \$200,000 for the 2007 field season). Conservancy funds for the 2007 field season shall not be disbursed unless: the United States Geological Survey (USGS)

provides a minimum of \$100,000 in matching funding; has committed to completion of data interpretation and mapping products for the 2007 mapping data at the same level they are providing for the 2006 field season; and all other funds necessary to complete the mapping in 2007 are secured.”

Staff further recommends that the Conservancy adopt the following findings:

“Based on the accompanying staff report and attached exhibits, the State Coastal Conservancy hereby finds that:

1. The proposed project is consistent with Chapter 5.5 of Division 21 of the Public Resources Code (Section 31220) regarding integrated coastal and marine resource protection.
2. The proposed project is consistent with the Project Selection Criteria and Guidelines adopted by the Conservancy on January 24, 2001.
3. The Foundation of California State University Monterey Bay (CSUMB) is a private nonprofit organization existing under Section 501(c)(3) of the United States Internal Revenue Code, whose purposes are consistent with Division 21 of the California Public Resources Code.

PROJECT SUMMARY:

Staff recommends that the Conservancy authorize a grant for seafloor substrate and habitat mapping through a grant to the Foundation of California State University, Monterey Bay (FCSUMB). The grant would enable CSUMB’s Seafloor Mapping Lab and USGS to undertake a collaborative data acquisition effort for the Santa Barbara Channel and Ventura Coast. The proposed project will be presented to the California Ocean Protection Council on June 8-9, 2006 at its meeting in Monterey. If approved by the Conservancy and the Ocean Protection Council, the grantee will use various geo-referenced mapping technologies as appropriate, including side-scan and multi-beam sonar to map areas of the Santa Barbara Channel and Ventura Coast. Using this new data, the grantee and USGS will deliver processed data and map products for the public and resource managers to better understand the current composition of the seafloor and habitat conditions in the area mapped as described below.

Project description

USGS already performs collaborative seafloor mapping work in the Santa Barbara Channel area focused on habitat characterization, coastal processes and erosion, and geologic hazards. This collaborative work is currently funded by USGS, Minerals Management Service, the BEACON (Beach Erosion Authority for Clean Oceans and Nourishment) consortium of local government agencies, and the City of Carpinteria. USGS and CSUMB mapping work planned for 2006 is shown in yellow in Exhibit 1. The proposed project would allow the expansion of mapping coverage of the Santa Barbara Channel area and make data acquisition more cost-efficient by reducing the proportional cost of mobilizing and demobilizing survey ships, equipment and personnel. The proposed expanded 2006 mapping area is shown as blocks A through D in green in Exhibit 1. Mapping of areas E through H would be completed in 2007 contingent upon federal matching funding from USGS.

Applications of seafloor mapping in the Santa Barbara Channel area

Accurate statewide mapping of seafloor substrate, marine habitat types, and bathymetry (underwater topography) of California's nearshore waters is a crucial component necessary to guide multiple ocean management decisions. Designating marine reserves, understanding sediment transport systems, ensuring shipping safety, identifying dredging and dumping sites, regulation of offshore coastal development, and illuminating the dynamics of fisheries and other marine species, are just a few of the applications that benefit from coastal and marine mapping data and products. In the Santa Barbara Channel area in particular, mapping would inform several important efforts: (a) benthic habitat mapping to support the Marine Life Protection Act (MLPA) and marine protected area design; (b) identification of potential offshore sand bodies for use in nourishing the region's depleted beaches and identification of regional marine sediment budget; (c) assessment of potential earthquake and tsunami hazards through identification of submarine faults and canyons; (d) improvement of information on oil seeps, discharge and potential environmental impacts; (e) provision of an ecological baseline for assessing and addressing potential sediment impacts associated with the planned removal of Matilija Dam.

The California Coastal and Marine Mapping Workshop

The proposed project would conform to the guidelines and standards set at the California Coastal and Marine Mapping Workshop that was held in December 2005. The Coastal Conservancy funded this workshop to (1) update the state mapping priorities defined in 2000 by the California Marine Habitat Task Force based on existing data, data needs, and end-user applications; and (2) develop a consensus on mapping protocols, standards, as well as data interpretation and mapping products. The Workshop Report (Exhibit 2) addresses: collection, management, and storage of both existing and newly acquired data; agreed-upon standards and protocols for data collection, post-processing, and interpretation of data; selection of various mapping products appropriate for resource management applications; and dissemination of mapping data and information to end-users and the public. All workshop participants voted on geographic priorities for future seafloor mapping in California state waters using maps of coastal fishing blocks. Three of the four blocks judged by workshop participants to have the highest mapping priority for the State will be mapped in the proposed project.

Grantee description

The FCSUMB is a 501(c)(3) non-profit organization, a recognized auxiliary to the California State University, and the fiscal agent for CSUMB's Seafloor Mapping Lab. The mission of the FCSUMB is to use its: fiscal flexibility to provide resources and services not supported by the State General Fund; operational expertise to implement and manage commercial enterprises and activities; and entrepreneurial acumen to generate revenue in support of the University's strategic initiatives. The CSUMB Seafloor Mapping Lab operated by Dr. Rikk Kvitek is one of the major seafloor data acquisition institutions in California, with significant experience in seafloor mapping, a dedicated survey vessel, and high-resolution mapping equipment.

PROJECT FINANCING:

Funding Sources for 2006:

Coastal Conservancy	\$ 200,000
U.S. Geological Survey	\$ 167,000
BEACON	\$ 40,000
City of Carpinteria	\$ 20,000
Minerals Management Service	<u>\$ 20,000</u>
Total 2006 Project Cost	\$ 447,000

Funding Sources for 2007:

Coastal Conservancy	\$ 200,000
U.S. Geological Survey (pending)	\$ 100,000
Other matching sources (pending)	<u>\$ TBD</u>
Total 2007 Project Cost	\$ 300,000

The Conservancy's contribution of \$400,000 is expected to come from its FY 01/02 and FY 02/03 appropriation from the "California Clean Water, Clean Air, Safe Neighborhood Parks and Coastal Protection Act of 2002" (Proposition 40) and from the Pavley appropriation for water quality projects. This funding source may be used for the deployment and development of land and water resources in accordance with the provisions of the Conservancy's enabling legislation, Division 21 of the Public Resources Code. The proposed project serves to assist in the management of water quality and sediment related to the planned removal of Matilija Dam and the management of sediment for beach nourishment along the Santa Barbara Channel, consistent with Chapter 5.5 of the Conservancy's enabling legislation as described below. Proposition 40 also requires the Conservancy to give priority to projects with matching funds. This project is supported by substantial matching funds from USGS, BEACON, the City of Carpinteria and the Minerals Management Service.

CONSISTENCY WITH CONSERVANCY'S ENABLING LEGISLATION:

This project would be undertaken pursuant to Chapter 5.5 (Section 31220) of Division 21 of the Public Resources Code, which allows the Conservancy to carry out projects that protect and/or restore marine habitat and promote integrated coastal and marine resources protection. Under Section 31220 of the Public Resources Code, the Conservancy may undertake projects that meet any of the objectives specified in subsection (b) of that section. Consistent with Section 31220(b), subsection 5, the proposed project will provide for monitoring and mapping of marine habitat in order to facilitate the protection and enhancement of resources within the coastal zone. In addition, the proposed project is consistent with 31220(b), subsection 10, since it will promote sustainable management through improved knowledge about the location and nature of the state marine resources, a major objective of the California Ocean Protection Act.

The Department of Fish and Game has been consulted with regard to this project, as required by Section 31220(b)(5). As also required by Section 31220(c), the project is consistent with adopted state and regional watershed planning as described below under "Consistency with Local Watershed Management Plan/State Water Quality Control Plan." Finally, as required by

Section 31220(a), Conservancy staff has consulted with the State Water Resources Control Board in the development of this project in order to ensure consistency with the Clean Beaches Program under Chapter 3 of Division 20.4 of the Public Resources Code.

CONSISTENCY WITH LOCAL WATERSHED MANAGEMENT PLAN/STATE WATER QUALITY CONTROL PLAN:

The intent of local coastal watershed management plans is to prevent water quality degradation and to protect the beneficial uses of coastal waters. Water quality control plans adopted by the State Water Resources Control Board are designed to focus resources on key issues, promote the use of sound science, and promulgate cooperative, collaborative efforts in coastal areas to protect and enhance coastal waters. As a coastal and marine habitat mapping project that includes coastal waters of California, the proposed project will promote the sustainable use of coastal resources and protection of marine habitat. For the same reasons, the proposed project is also consistent with the policies of the 2001 California Ocean Plan that states “the beneficial uses of the ocean waters of the State that shall be protected include...water contact and non-contact recreation; aesthetic enjoyment; commercial and sport fishing; ...preservation and enhancement of designated Areas of Special Biological Significance (ASBS); rare and endangered species; marine habitat; (and) fish migration.”

CONSISTENCY WITH CONSERVANCY'S STRATEGIC PLAN GOAL(S) & OBJECTIVE(S):

Consistent with **Goal 6, Objectives A & B**, the proposed project will benefit coastal marine resources through the mapping of coastal and marine substrate and habitat in California's central and southern coast, which will promote sustainable use and management of coastal and marine resources.

CONSISTENCY WITH CONSERVANCY'S PROJECT SELECTION CRITERIA & GUIDELINES:

The proposed project is consistent with the Conservancy's Project Selection Criteria and Guidelines adopted January 24, 2001, in the following respects:

Required Criteria

1. **Promotion of the Conservancy's statutory programs and purposes:** See the “Consistency with Conservancy's Enabling Legislation” section above.
2. **Consistency with purposes of the funding source:** See the “Project Financing” section above.
3. **Support of the public:** The proposed project is supported by the California Coastal Commission, California Department of Boating and Waterways, the California Department of Conservation's Geological Survey, the Beach Erosion Authority for Clean Oceans and Management (BEACON) and the City of Carpinteria. Letters of support are located in Exhibit 3.
4. **Location:** Statewide, within the coastal zone and state waters off the Central Coast.

5. **Need:** The USGS has already contributed a significant amount to the proposed project, and has already identified matching funds from several partners to support the project. There are currently no other sources of funding available for the project, nor does CSUMB or USGS have the funding to complete this mapping effort without Conservancy funding. The mapping data that would be generated by this project is critical for both the MLPA process and planning for removal of Matilija Dam.
6. **Greater-than-local interest:** The citizens of California throughout the state will benefit from this project through more informed, sustainable management of coastal and marine resources that will result from mapping of coastal and marine resources.

Additional Criteria

Resolution of more than one issue: Marine substrate and habitat mapping will support a variety of needs: marine protected areas management, fisheries management, offshore development regulation, protection of rare and endangered species, and improved navigation.

Leverage: See the “Project Financing” section above.

Readiness: The Foundation of CSUMB and the Seafloor Mapping Lab are ready to commence mapping work immediately upon approval of the proposed project.

Innovation: The proposed project will promote technologically innovative mapping techniques.

Cooperation: The proposed project will involve the cooperation of numerous state and federal agencies, academic institutions, and researchers.

COMPLIANCE WITH CEQA:

The proposed project is categorically exempt from review under the California Environmental Quality Act (CEQA), pursuant to 14 Cal. Code of Regulations, Section 15306 (data collection, research and resource evaluation activities which do not result in a serious or major disturbance to an environmental resource). The proposed project will not result in disturbance to the marine environment or its wildlife, as the multibeam and sidescan sonar technologies to be used for the proposed project do not use frequencies that disturb marine mammals or any other aquatic species. Staff will file a Notice of Exemption upon approval.